

**AGENCY REQUEST FOR
A/E SELECTION
October 2016**

AGENCY: Department of Administration (DOA)

AGENCY CONTACT: Ted Crawford; (608) 266-1674; ted.crawford@wisconsin.gov

LOCATION: Capitol Heat and Power Plant
624 E. Main Street
Madison, Wisconsin

PROJECT REQUEST:

The A/E will provide pre-design through construction administration services for Lake Water System Improvements at the Capitol Heat and Power Plant for a total estimated project cost of \$420,000. A/E services will follow the DFD “*Policy and Procedure Manual for Architects/Engineers and Consultants*”, the “*Guide for Developing Program Statements for Projects Requiring Enumeration*”, and the DFD “*Contract for Professional Services* as directed by DFD at the Design Kickoff meeting. The services may be contracted for in multiple contracts, or a multi-part contract with project-specific review/ approval/ authorization points in the contract as determined by the needs of the project. Authorization for subsequent services will be issued in writing upon satisfactory performance and completion of contracted services and deliverables.

The A/E design team for this project shall have civil and structural design and construction experience in water intake and storage structures, masonry repairs and site/civil utilities including water piping.

PROJECT NUMBER: 16H2I

PROJECT DESCRIPTION:

This project will develop options for repairs to the lake water system serving the Capitol Heat and Power Plant (CHPP) and the Capitol grounds irrigation system. Option development will include investigation of groundwater contamination point sources to confirm whether the lake water inlet wet well adjacent to the CHPP is the sole source or if the intake piping from the lake is also a contributor. A full description of the existing conditions is required. Lake water wet well repairs consist of reconstruction of failing portions including lining the wet well interior; the repair or replacement of the above grade masonry and roof of the wet well; the replacement of the security access door, ladder and platform and the repair or replacement of wet well piping. Additionally, all existing wet well conditions that present security and safety issues will need to be addressed in this project. The project will design and construct the selected option.

JUSTIFICATION:

In the past two years, CHPP lake water quality has been degrading due to leaks in the lake water intake system that has resulted from corrosion and groundwater infiltration. The groundwater has increased the conductivity of the water causing corrosion of the steel piping and pumping systems. This brings with it surface deicing compounds spread in the winter which have leached into the ground and is detrimental to the plants served by the irrigation system. Also, this is degrading the district cooling system piping and plant equipment and increasing treatment and operating costs.

The CHPP operates 24/7/365 providing district cooling and heating services to downtown State office buildings, the State Capitol, Monona Terrace Convention Center, Wilson Lake Terrace, City County Building, and the County Justice Center. This facility also provides dedicated primary electric power, emergency power and irrigation water services to the State Capitol. Lake water is used for irrigation of the Capitol grounds, cooling essential plant equipment and for the district cooling system's cooling tower. Interruption of vital plant services presents a high risk for loss of business for the customers the plant serves. Studies have indicated that the integrity of this system, installed in 1908, is in jeopardy. Additionally, plant personnel required to access the wet well on a regular basis to perform routine maintenance are working in unsafe conditions.

The lake water system improvements project at the CHPP is included as All Agency Requests (AAPRs) in the Department's 17-19 Capital Budget Request. In April 2012, an A/E consultant reviewed and provided a condition assessment of the water supply system and recommendations for future work. The selected A/E will receive this information and hard copies of CHPP water system drawings at the Design Kickoff meeting.

BUDGET/SCHEDULE:

Budget Line	\$
Construction	\$
Design	\$
DFD Mgmt.	\$
Contingency	\$
Equipment	\$
Other Fees	\$
Total Project Cost	\$ 420,000

Project Schedule	Date
A/E Selection	SEPT 2016
Pre-Design	DEC 2016
Design Report	FEB 2017
SBC Approval	MARCH 2017
Bid Opening	JUNE 2017
Start Construction	SEPT 2017
Substantial Completion	DEC 2017
Final Completion	JAN 2018